## 1.0 PURPOSE

1.1 To define the responsibilities and describe the methods and documents to be used to carry out Completion Inspections on various features of work.

1.2 The intention of this inspection is to allow further construction upon, or integral to, the completed work feature that will be "closed in" and thus unavailable for later inspection.

## 2.0 SCOPE

2.1 This procedure applies when features of work have been completed and inspected to verify they are complete and conform to the applicable requirements before the start of the next operation may begin.

## 3.0 DEFINITIONS

3.1 WSDOT Washington State Department of Transportation

3.2 Project Engineer The WSDOT person assigned as the principle point of contact for the project

3.3 Features of Work: Examples include completion of the substructure prior to constructing the superstructure, completion of roadway sub base and base prior to paving, completion of pavement prior to striping.

## 4.0 RESPONSIBILITIES

4.1 The Segment Manager or, in the case of subcontracted work, the Subcontractor's quality Representative shall notify the QA/QC Segment Manager when a feature of work has been completed and is ready for a Completion Inspection.

4.2 The QA/QC Segment Manager shall perform the Completion Inspection and record all deficiencies. As part of the completion Inspection, the WESOT, and involved local agency representatives shall be notified and requested to participate.

## 5.0 PROCEDURE

5.1 The Segment Manager or Subcontractor Quality Control Representative shall be responsible for insuring that the feature(s) of work designated for completion have in fact been substantially completed prior to scheduling a formal Completion Inspection. A "Notice of Inspection or Test" shall be initiated and forwarded to the QA/QC Segment Manager for distribution.

5.2 The QA/QC Segment Manager or his Designee shall inspect the feature of work to verify that it is complete and conforms to the applicable requirements. Particular attention will be placed on any aspects of the work which may be covered by the next operation.

5.3 During the Completion Inspection, deficient items shall also be noted on the Construction Deficiency Sheet (punch list). Copies will be given to the Construction representatives for action following the inspection.

5.4 The completion Inspection details shall be entered on the QA Completion Inspection Report form during the inspection process.

5.5 At the end of the inspection, the Construction, QA representative and others as applicable shall sign-off on the form. The completed form, with accompanying Construction Deficiency Report Sheet if any, shall be forwarded to the QA Document Control Manager for processing.

5.6 Completion Inspections are not Acceptance Inspections. However, they do form the basis for the follow-on Partial Final Inspections.

## 6.0 REFERENCES

Quality Assurance/Quality Control Program Manual.

## 7.0 ATTACHMENTS

7.1 QA Completion Inspection Report

7.2 Notice of Inspection or Test

7.3 Construction Deficiency Report Data Input Sheet

7.4 Flow Chart

| **NOTICE OF INSPECTION OR TEST** | Report No.: | Date: |
|---|---|---|
| Area: | | Section: |
| | | Station: |

Notification of:

☐ Inspection ☐ Preparatory ☐ Initial ☐ Partial ☐ Mechanical ☐ Electrical ☐ Structural

☐ Test ☐ Completion ☐ Final ☐ Civil ☐ Other: _____

| Requested By: | Organization: |
|---|---|
| Contractor:<br>Subcontractor/Vender | Contract No. |

Location of Inspection or Test:

_____

Type of Work Scheduled:

| Date to be Performed: | Time: |
|---|---|

Specifications and/or Drawing Reference(s):

Remarks or Special Instructions:

**This notification should be completed and delivered to the Quality Assurance Manager at least 48 hours prior to the time of scheduled inspection or test.**

NOTIFICATION RECEIVED

| | | | |
|---|---|---|---|
| Subcontractor QC Representative: | Date: | Design/Builder QA Representative: | Date: |
| Contractor QC Representative: | Date: | Others: | Date: |
| Construction Representative: | Date: | Others: | Date: |

**Design/Builder**

# CONSTRUCTION DEFICIENCY REPORT - DATA INPUT SHEET

(To Be Turned in Daily)

☐ Subcontractor/Vendor

**Kirkland Stage1 D/B Project**
**600 108th Ave. Suite 405**
**Office 425-456-8500**

BY: _____

| Contractor I.D. | Segment<br>Section | Station<br>Discipline | Item Description | Action By 1<br>Action By 2 | Date ID<br>Insp. Type | Schd. Cmplt. | Comments |
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Design Build

Kirkland Stage 1

Contract No.



| QA COMPLETION INSPECTION REPORT, Report No.: | Date: |
|---|---|
| ☐ Reinspection (Check Only if Applicable) | Section: |
| ☐ Contractor | Station: |
| ☐ Subcontractor/Vendor | Contract No.: |
| Type of Work Scheduled: | |

Agenda: Note all applicable items. Open items shall be included in the deficiency list. For outstanding work, use deficiency list.

| ITEM | | | | |
|---|---|---|---|---|
| | | 1. Nonconformance Reports | 6. Training Owner Personnel | 11. Required Product Specifications |
| | | 2. Test & Inspection Reports | 7. Certificates of Inspection/Approval | 12. Required Product Guarantees |
| | | 3. Equipment Start-up/Testing | 8. As-built Drawings | 13. Keys-Buildings, Equipment |
| | | 4. Construction Deficiency List | 9. 0 & M Manuals | 14. Other - Specify |
| No. | * | 5. Final Clean-up Work Area | 10. Spare Parts List(s) | 15. Attendees |
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| | | * Refer to Deficiency List | | |

Test Verification:

All tests are complete and ☐ Acceptable ☐ Not acceptable ☐ Other (Specify)

Inspection Results:

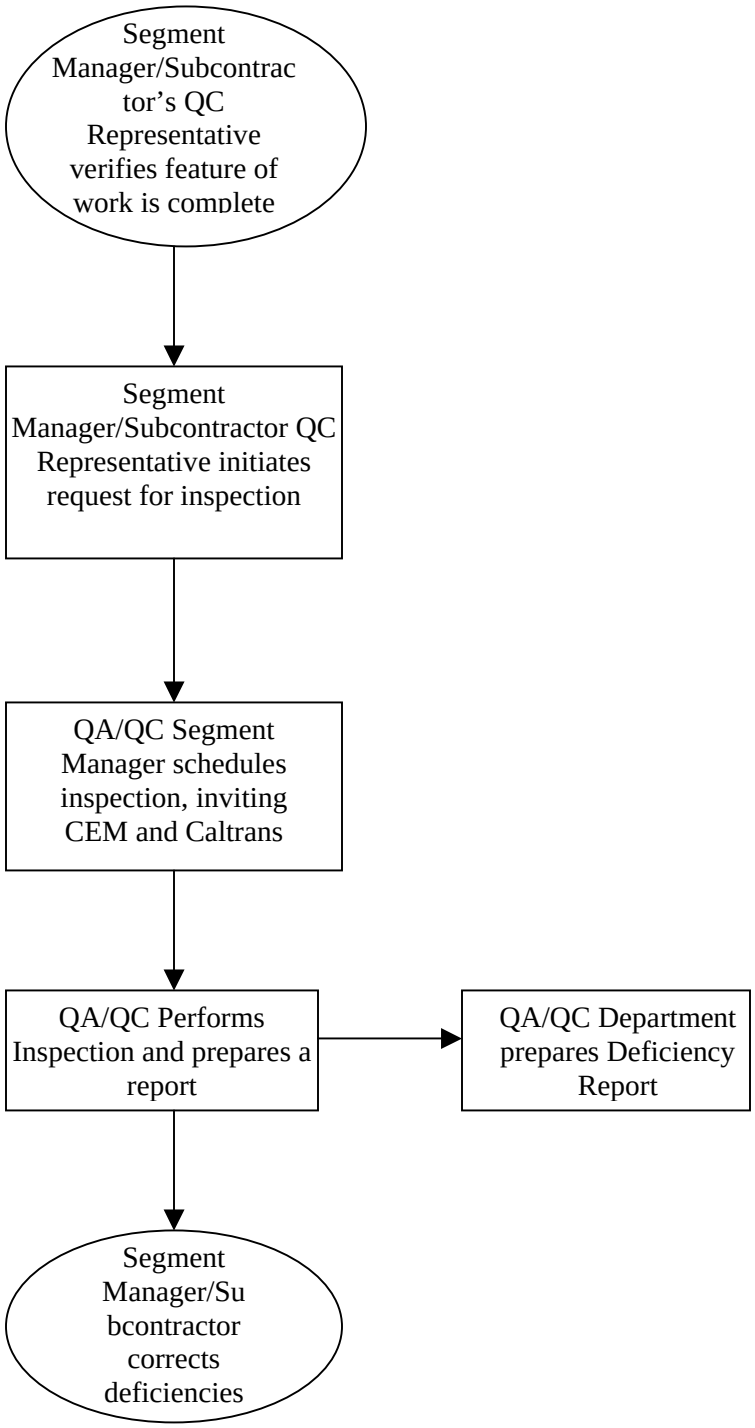
☐ Acceptable, no deficiency list items ☐ Correct deficiencies, reinspection not required ☐ * Correct deficiencies, reinspection required

| QA Representative: | Contractor QC Representative: |
|---|---|
| Construction Representative: | Others: |

**Design Builder**

# QUALITY MANAGEMENT PROCEDURES

## COMPLETION INSPECTION



## 1.0 PURPOSE

1.1 To define the responsibilities and describe the methods and documents to be used to carry out Partial Final Inspections of portions of the project within a Segment.

## 2.0 SCOPE

2.1 This procedure applies to those portions and/or sections of a project Segment which have been substantially completed.

2.2 The Partial Final Inspection shall demonstrate the conformance of a particular portion of work or system to the contract requirements. Completed portions of work may include sections of roadway, bridges, structures, and environmental areas, or in the case of subcontracted work, specific elements of work associated with a portion of the project.

## 3.0 DEFINITIONS

3.1 WSDOT Washington State Department of Transportation

3.2 Project Engineer The PE for WSDOT

3.3 Substantial Completion: Implies that a particular portion and/or section of a project Segment has been significantly completed with no major punch list items remaining.

## 4.0 RESPONSIBILITIES

4.1 The Segment Manager or, in the case of subcontracted work, the Subcontractor's Quality Representative shall notify the QA/QC Segment Manager when a portion and/or section of a Segment has been Substantially Completed and is ready for a Partial Final Inspection. Where sections of roadway are being considered for Partial Final Inspection, the size and length of the roadway to be scheduled for inspection shall be determined by the Segment Manager.

4.2 As a prelude to performing any Partial Final Inspection, the QA/QC Segment Manager shall assemble a list of all remaining deficient work items, incomplete work, outstanding tests, material reports and open Non-conformance Reports for the portion or section of work being considered for Partial Final Inspection. The Design/Builder Section Design Engineer, PE, WSDOT, and involved local agency representatives shall be notified and requested to participate in the inspection.

## 5.0 PROCEDURE

5.1 The Segment Manager or Subcontractor Quality Control Representative shall be responsible for insuring that the portions and/or sections of a Segment designated for inspection have in fact been substantially completed prior to scheduling a formal Partial Final Inspection. A "Notice of Inspection or Test" shall be initiated and forwarded to the QA/QC Manager for distribution.

5.2 The QA/QC Segment Manager or his Designee shall perform a formal inspection of the completed portion or section of the Segment.

5.3 During the Partial Final Inspection, deficient items shall also be noted on the Construction Deficiency Sheet (punch list). Copies will be given to the Construction Representatives for action following the inspection.

5.4 The Partial Final Inspection details shall be entered on the QA Partial/Final Inspection Report form during the inspection process.

5.5 At the end of the inspection, the Construction, QA Representative, Section Design Engineer, and others as applicable shall sign off on the form. The completed form, with accompanying Construction Deficiency Report Sheet, if .any, shall be forwarded to the QA Document Control Manager for processing.

5.6 The Partial Final Inspections are not Acceptance Inspections. However, they form the basis of requesting Substantial Completion of a Segment and/or approved subsegment and must be performed as a prerequisite to any Final Inspection.

## 6.0 REFERENCES

6.1 Quality Control Program Manual

6.2 Quality Management Procedures Manual

7.0 **ATTACHMENTS**

7.1 QA Partial/Final Inspection Report

7.2 Notice of Inspection or Test

7.3 Construction Deficiency Report Data Input Sheet

7.4 Flow Chart

Design Build

**Kirkland Stage 1**

**Page __ of __**

**Contract No.**

| **QA PARTIAUFINAL INSPECTION REPORT** **ı Report No.:** | **Date:** |
|---|---|
| **Contractor** | **Section** |
| **Subcontractor/Vendor** | **Station:** |
| **Type of Work Scheduled:** | **Contract No.:** |

**Agenda:**

**ATTENDEES**

| NAME | ORGANIZATION | Title | TELEPHONE |
|---|---|---|---|
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Notes: Deficiency Item (Punch List) is Attached

Remarks:

**INSPECTION RESULTS**

**1. Acceptable** **2. Correct Deficiencies, Reinspection not Required** **3. Correct Deficiencies, Reinspection Required**

**SIGNATURES**

| | | |
|---|---|---|
| **Construction/Contractor:** | **Contractors QC Rep.:** | **QA Rep.:** |
| **Other:** | **Design Eng. Rep.:** | **Other Rep.:** |

| **NOTICE OF INSPECTION OR TEST** | Report No.: | Date: |
|---|---|---|
| Area: | | Section: |
| | | Station: |

Notification of:

☐ Inspection ☐ Preparatory ☐ Initial ☐ Partial ☐ Mechanical ☐ Electrical ☐ Structural

☐ Test ☐ Completion ☐ Final ☐ Civil ☐ Other: _____

| Requested By: | Organization: |
|---|---|
| Contractor:<br>Subcontractor/Vender | Contract No. |

Location of Inspection or Test:

_____

Type of Work Scheduled:

| Date to be Performed: | Time: |
|---|---|

Specifications and/or Drawing Reference(s):

Remarks or Special Instructions:

**This notification should be completed and delivered to the Quality Assurance Manager at least 48 hours prior to the time of scheduled inspection or test.**

NOTIFICATION RECEIVED

| | | | |
|---|---|---|---|
| Subcontractor QC Representative: | Date: | Design/Builder QA Representative: | Date: |
| Contractor QC Representative: | Date: | Others: | Date: |
| Construction Representative: | Date: | Others: | Date: |

**Design/Builder**

# CONSTRUCTION DEFICIENCY REPORT - DATA INPUT SHEET

(To Be Turned in Daily)

☐ Subcontractor/Vendor

**Kirkland Stage1 D/B Project**
**600 108th Ave. Suite 405**
**Office 425-456-8500**

BY: _____

| Contractor I.D. | Segment<br>Section | Station<br>Discipline | Item Description | Action By 1<br>Action By 2 | Date ID<br>Insp. Type | Schd. Cmplt. | Comments |
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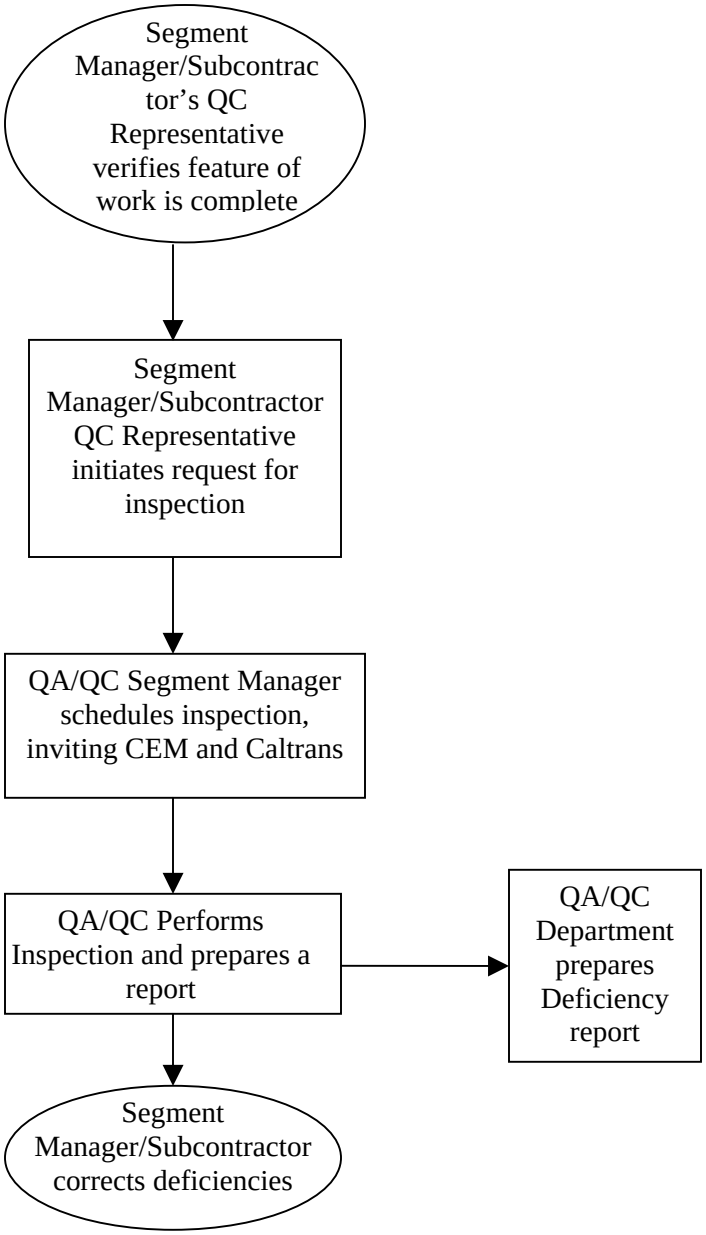
Segment Manager/Subcontractor's QC Representative verifies feature of work is complete
Segment Manager/Subcontractor QC Representative initiates request for inspection
QA/QC Segment Manager schedules inspection, inviting CEM and Caltrans
QA/QC Performs Inspection and prepares a report
QA/QC Department prepares Deficiency report
Segment Manager/Subcontractor corrects deficiencies

## 1.0 PURPOSE

1.1 To define the responsibilities and describe the methods and documentation to be used to carry out the Final Inspection of Substantially Completed project Segments and/or approved sub-segments.

## 2.0 SCOPE

2.1 This procedure applies to the project Segments, and/or approved sub-segments,

2.2 The Final Inspections shall be performed when all elements of work have been Substantially Completed by all entities performing work in the Segment and/or sub segment.

2.3 Final Inspection is an acceptance inspection which requires the participation of the WSDOT, and involved local agencies.

## 3.0 DEFINITIONS

3.1 WSDOT Washington State Department of Transportation

3.2 PE The designated WSDOT representative

3.3 Partial Acceptance: Means that a project Segment or Sub-segment achieves Substantial Completion and may be accepted by WSDOT.

3.4 Substantial Completion: Implies that a particular project Segment and/or sub segment has been significantly completed and is ready for operation.

## 4.0 RESPONSIBILITIES

4.1 The Construction Manager shall ensure that all work within the Segments and/or sub-segment has been Substantially Completed in anticipation of scheduling Final Inspections.

4.2 The Segment Manager shall ensure that all aspects of his particular Segment have been satisfactorily completed including; identified deficiencies, Non-conformance Reports, and "as built".

4.3 The QA/QC Segment Manager will verify that all required in-process inspections and Partial Final Inspections have been performed and documented in accordance with the QA/C Program Manual.

4.4 The QA/QC Manager shall coordinate the performance of the Final Inspection with WSDOT and local agency representatives.

**5.0 PROCEDURE**

5.1 Final Inspection of a Segment and/or sub segment shall be scheduled by the QA/QC Manager when all elements of work have been Substantially Completed by all entities performing work in the Segment.

5.2 In addition to verifying that all required in-process and Partial Final inspections and tests have been performed, the following must have occurred:

5.2.1 All work has been completed (except for Punch List and final cleanup).

5.2.2 The Segment and/or sub segment had been constructed in accordance with the requirements of the Contract Documents.

5.2.3 The Segment and/or sub segment may be operated without damage to the Project or any other property on or off the site, and without injury to any person.

5.2.4 The Segment and/or sub segment is ready for operation

5.3 Final Inspections shall be scheduled sufficiently in advance of requesting Substantial Completion and Partial Acceptance from WSDOT for a Segment and/or sub-segment

5.4 In addition to the performance of a document review, the Final Inspection of a Segment and/or sub-segment shall include a formal walk-through coordinated by the QA/QC Manager with WSDOT and local agency.

5.5 The Final Inspection details shall be entered on the QA Partial/Finial Inspection Report form during the inspection process.

5.6 At the end of the inspection a review meeting shall be held to discuss the results of the inspection and any outstanding issues which may impact Substantial Completion and Partial Acceptance of the Segment and/or sub-segment.

## 6.0 REFERENCES

6.1 Quality Assurance/Quality Control Program Manual

6.2 Quality Management Procedures

## 7.0 ATTACHMENTS

7.1 QA Partial/Final Inspection Report

7.2 Notice of Inspection or Test

7.3 Construction Deficiency Report Data Input Sheet

7.4 Flow Chart

| Design Build | | | | | **Kirkland Stage 1** | | | | Page __ of __ |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Contract No. | | | |
| | | | | | | | | | |
| **QA PARTIAUFINAL INSPECTION REPORT** | | | | | | Report No.: | | Date: | |
| □ Contractor | | | | | | | | Section | |
| □ Subcontractor/Vendor | | | | | | | | Station: | |
| Type of Work Scheduled: | | | | | | | | Contract No.: | |
| | | | | | | | | | |
| Agenda: | | | | | | | | | |
| | | | | | **ATTENDEES** | | | | |
| | | **NAME** | | | **ORGANIZATION** | | | **Title** | **TELEPHONE** |
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| Notes: | Deficiency Item (Punch List) is Attached | | | | | | | | |
| Remarks: | | | | | | | | | |
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| | | | | | INSPECTION RESULTS | | | | |
| □ 1. Acceptable | | | □ 2. Correct Deficiencies, Reinspection not Required | | | | □ 3. Correct Deficiencies, Reinspection Required | | |
| | | | | | SIGNATURES | | | | |
| Construction/Contractor: | | | | | Contractors QC Rep.: | | | QA Rep.: | |
| Other: | | | | | Design Eng. Rep.: | | | Other Rep.: | |

| **NOTICE OF INSPECTION OR TEST** | Report No.: | Date: |
|---|---|---|
| Area: | | Section: |
| | | Station: |

Notification of:

☐ Inspection ☐ Preparatory ☐ Initial ☐ Partial ☐ Mechanical ☐ Electrical ☐ Structural

☐ Test ☐ Completion ☐ Final ☐ Civil ☐ Other: _____

| Requested By: | Organization: |
|---|---|
| Contractor:<br>Subcontractor/Vender | Contract No. |

Location of Inspection or Test:

_____

Type of Work Scheduled:

| Date to be Performed: | Time: |
|---|---|

Specifications and/or Drawing Reference(s):

Remarks or Special Instructions:

**This notification should be completed and delivered to the Quality Assurance Manager at least 48 hours prior to the time of scheduled inspection or test.**

NOTIFICATION RECEIVED

| | | | |
|---|---|---|---|
| Subcontractor QC Representative: | Date: | Design/Builder QA Representative: | Date: |
| Contractor QC Representative: | Date: | Others: | Date: |
| Construction Representative: | Date: | Others: | Date: |

**Design/Builder**

# CONSTRUCTION DEFICIENCY REPORT - DATA INPUT SHEET

(To Be Turned in Daily)

☐ Subcontractor/Vendor

**Kirkland Stage1 D/B Project**
**600 108th Ave. Suite 405**
**Office 425-456-8500**

BY: _____

| Contractor I.D. | Segment<br>Section | Station<br>Discipline | Item Description | Action By 1<br>Action By 2 | Date ID<br>Insp. Type | Schd. Cmplt. | Comments |
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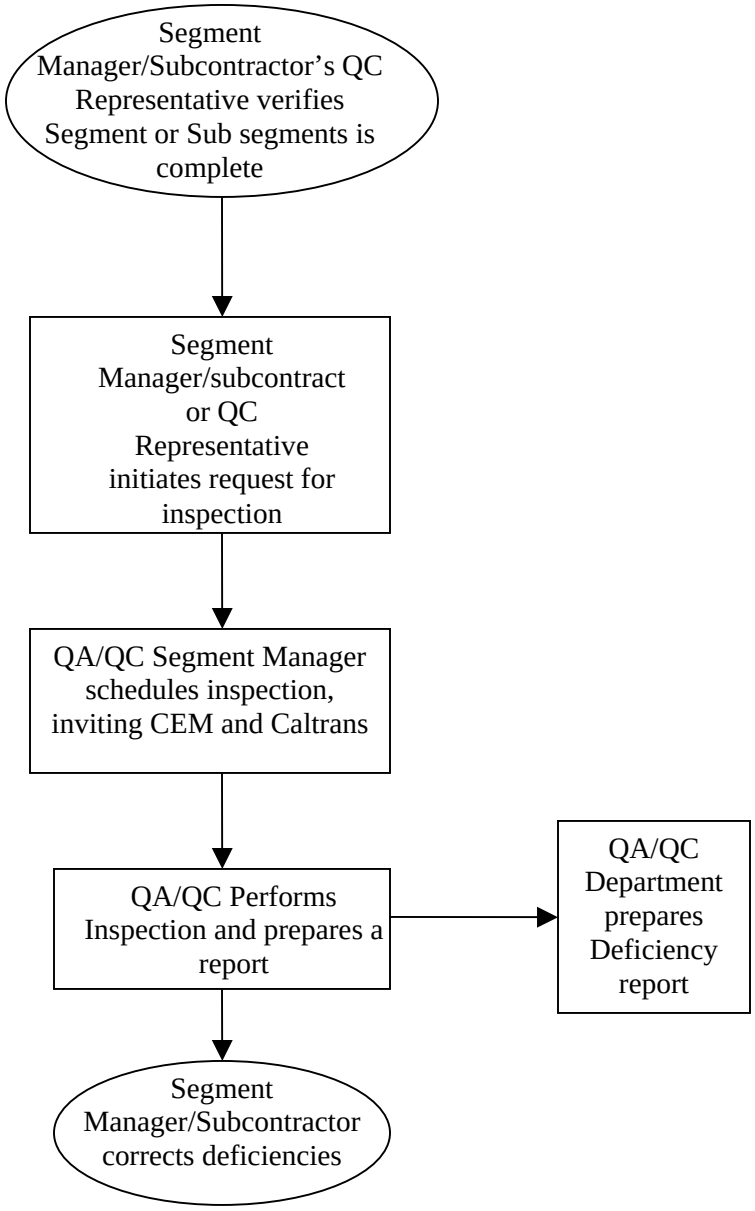
# QUALITY MANAGEMENT PROCEDURES

## FINAL INSPECTION



## 1.0 PURPOSE

1.1 To define the responsibilities and describe the methods and documents to be used for accepting and turning over to FHWA project Segments and/or sub-segments which have been Substantially completed.

## 2.0 SCOPE

2.1 This procedure applies to the identified Project Segments,

## 3.0 DEFINITIONS

3.1 PE The Designated WSDOT representative

3.2 Final Acceptance: Defines the acceptance of the Project after all Segments have been satisfactorily completed and the requirements of the Scope of Work have been met.

3.3 Final Inspection: Formal Inspection of a completed Segment or sub segment.

3.4 Final Guaranteed Completion Date: Is the contract date when the entire Project must be substantially completed.

3.5 Guaranteed Completion Date: Contract established dates by when the Segments must be substantially completed.

3.6 Partial Acceptance:. May be granted after achieving Substantial Completion of a Segment as outlined in the Design/Build Contract.

3.7 Partial Final Inspection: Formal Inspection of a completed portion of the project within a Segment (section of roadway, bridge or environmental area).

3.8 Substantial Completion: Implies that a particular project Segment or sub segment has been significantly completed and is ready for operation.

3.9 WSDOT Washington State Department of Transportation

**4.0 RESPONSBILITIES**

4.1 The Project Manager shall determine what Segments and/or useable sub segments will be opened to traffic prior to the contract Guaranteed Completion Dates.

4.2 The Construction Manager shall ensure that all work within the Segments or sub segment has been substantially completed in anticipation of scheduling Final Inspections and requests for Partial Acceptance.

4.3 The Segment Manager shall ensure that all aspects of his particular Segment have been satisfactorily completed including; identified deficiencies, Non-conformance Reports, and as-builts.

4.4 The QA/QC Manager will verify that all required in-process inspections and Partial Final inspections have been performed and documented in accordance with the QA/QC Program Manual. Upon achieving substantial completion, the QA/QC Manager shall coordinate the performance of the Final Acceptance Inspections with WSDOT and local agency representatives.

**5.0 PROCEDURE**

5.1 The project has been separated into segments with one of the segments designated to be opened to traffic prior to the Final Guaranteed Completion Date for the entire Project. . In addition, the project includes the completion of the off site Mitigation Areas. Each identified segment, facility within a segment and Mitigation Area shall be. Substantially Completed prior to requesting Acceptance from WSDOT.

5.2 At any time during the project, the Project Manager may propose and submit a Notice of Intent to WSDOT to open to traffic any Segment and/or useable sub segments of work prior to the Guaranteed Completion Date. The notice shall be submitted to WSDOT a minimum of one month prior to the proposed sub segment early opening date. Subsequent to the acceptance of the Notice of Intent, a Request For Early Opening shall be submitted a minimum of twelve months prior to the proposed early opening date and shall include at a minimum the following information:

5.2.1 A description of the sub segment including all interchange and arterial improvements;

5.2.2 The proposed date of opening to traffic for the above described sub segment;

5.2.3 All necessary traffic analysis (showing projected traffic volumes with and without the proposed early opening) for the revised opening year traffic showing the operating level of service for all key roadway links and intersections and the projected toll traffic volumes for the Corridor components open to traffic;

5.2.4 Written approvals from all applicable local agencies stating that they have approved the proposed early opening of the sub segment, to traffic;

5.3 During construction, phased inspections shall be performed for all features of work and/or activities within each Segment and/or sub segment. The In-process inspection and testing plan includes Preparatory Meetings, Initial Inspections, Follow-up (Daily Surveillance) Inspections, and Completion Inspections. Results of these inspections, with supporting test information, provides documented evidence that the work has been constructed to the approved design plans and specifications. Negative findings or exceptions noted during any inspections shall be reported via Construction Deficiency Reports. The QA/QC Document Control Manager shall maintain an electronic Deficiency Tracking System which will be updated weekly.

5.4 The In-process inspections shall be performed by the QA/QC Segment Manager with the participation of the WSDOT and appropriate local agencies. The inspection plan has been designed to insure that all required inspections and tests are performed and documented as the work progresses toward substantial completion. In-process inspections are not Acceptance inspections; however they do form the basis for the Partial Final and follow-on Final Acceptance inspections.

5.5 Upon completion of a portion of work within a Segment and/or approved sub segment, a Partial Final Inspection shall be performed. The Partial Final Inspection shall demonstrate the conformance of a particular portion of work or system to the contract requirements. Completed portions of work may include sections of roadway, bridges, structures, and environmental areas. The performance of Partial Final Inspections shall be coordinated between the Segment Manager and QA/QC Segment Manager and shall include representatives from the WSDOT and any involved local agency. These inspections will be scheduled sufficiently in advance. Partial Final Inspections are not Acceptance inspections. However, they serve as the basis for the Final Inspection for any Segment and/or sub segment. All inspection results will be documented on the Partial Final Inspection Report and any deficiencies noted on the Construction Deficiency Report.

5.6 Final Inspection of a Segment and/or sub segment shall be scheduled by the QA/QC Manager when all elements of work have been substantially completed by all entities performing work in the Segment. QA/QC shall verify that all portions of the Segment and/or sub segment have been subjected to the Partial Final inspection process and all of the following have occurred:

- all work has been completed (except for Punch List and final cleanup);

- the Segment and/or subsegment has been constructed in accordance with the requirements of the Contract Documents;

- the Segment and/or subsegment may be operated without damage to the Project or any other property on or off the site, and without injury to any person; and

5.8 Final Inspections shall be a formal inspection involving the WSDOT and responsible local agencies. Results of the inspection shall be documented on a Final Inspection Report. .

5.9 Substantial Completion and Partial Acceptance of the Project, Segment and/or subsegment shall be requested from WSDOT after the following have occurred:

- Correction of all defects, and/or deficiencies in the Project relating to any of the items described in 5.7 above and/or deviations of any installed equipment, materials and workmanship from the requirements of the Contract Documents;
- all applicable Governmental Approvals for the Project, Segment and/or subsegment have been obtained;
- a punch list for the Project, Segment and/or subsegment and a list of review comments to be performed after opening of the Project, Segment and/or subsegment has been mutually agreed to by WSDOT and the Design/Builder
- performed all work required by the authorities having jurisdiction over the Project or Segment;

5.10 Final Acceptance of the Project shall be requested by the Project Manager from WSDOT after the following have occurred:

- all requirements for Substantial Completion of the Project have been fully satisfied;
- all Design Documents, as-built drawings, ROW record maps, surveys, test data and other deliverables required under the contract have been transferred to WSDOT;
- all special tools and spare parts have been delivered to WSDOT;
- certification representing that there are no outstanding claims, liens or stop notices by any subcontractor (in accordance with the Contract Scope of Work);
- that all remaining punch list items have been completed to the reasonable satisfaction of WSDOT
- prepare and deliver to WSDOT a Notice of Completion for the Project in recordable form and meeting all statutory requirements.

## 6.0 REFERENCES

6.1 The Contract

6. Design/Builder Quality Assurance/Quality Control Program Manual

## 7.0 A'ITACHMENTS

7.1 Notice of Inspection or Test

7.2 QA Partial/Final Inspection Report

7.3 Construction Deficiency Report

7.4 Segment Opening Map

7.5 Inspection Flow Diagram

| **NOTICE OF INSPECTION OR TEST** | Report No.: | Date: |
|---|---|---|
| Area: | | Section: |
| | | Station: |

Notification of:

☐ Inspection ☐ Preparatory ☐ Initial ☐ Partial ☐ Mechanical ☐ Electrical ☐ Structural

☐ Test ☐ Completion ☐ Final ☐ Civil ☐ Other: _____

| Requested By: | Organization: |
|---|---|
| Contractor:<br>Subcontractor/Vender | Contract No. |

Location of Inspection or Test:

_____

Type of Work Scheduled:

| Date to be Performed: | Time: |
|---|---|

Specifications and/or Drawing Reference(s):

Remarks or Special Instructions:

**This notification should be completed and delivered to the Quality Assurance Manager at least 48 hours prior to the time of scheduled inspection or test.**

NOTIFICATION RECEIVED

| | | | |
|---|---|---|---|
| Subcontractor QC Representative: | Date: | Design/Builder QA Representative: | Date: |
| Contractor QC Representative: | Date: | Others: | Date: |
| Construction Representative: | Date: | Others: | Date: |

Design Build

**Kirkland Stage 1**

**Page __ of __**

**Contract No.**

| | |
|---|---|
| **QA PARTIAUFINAL INSPECTION REPORT** **I Report No.:** | **Date:** |
| **Contractor** | **Section** |
| **Subcontractor/Vendor** | **Station:** |
| **Type of Work Scheduled:** | **Contract No.:** |

**Agenda:**

**ATTENDEES**

| NAME | ORGANIZATION | Title | TELEPHONE |
|---|---|---|---|
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Notes: Deficiency Item (Punch List) is Attached

Remarks:

**INSPECTION RESULTS**

**1. Acceptable** **2. Correct Deficiencies, Reinspection not Required** **3. Correct Deficiencies, Reinspection Required**

**SIGNATURES**

| | | |
|---|---|---|
| **Construction/Contractor:** | **Contractors QC Rep.:** | **QA Rep.:** |
| **Other:** | **Design Eng. Rep.:** | **Other Rep.:** |

**Design/Builder**

# CONSTRUCTION DEFICIENCY REPORT - DATA INPUT SHEET

(To Be Turned in Daily)

☐ Subcontractor/Vendor

**Kirkland Stage1 D/B Project**
**600 108th Ave. Suite 405**
**Office 425-456-8500**

BY: _____

| Contractor I.D. | Segment<br>Section | Station<br>Discipline | Item Description | Action By 1<br>Action By 2 | Date ID<br>Insp. Type | Schd. Cmplt. | Comments |
|---|---|---|---|---|---|---|---|
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# QUALITY MANAGEMENT PROCEDURES

**Design Builder**

# ACCEPTANCE AND TURNOVER

## PHASE 1: IN PROCESS INSPECTION

| | |
|---|---|
| Preparatory Meeting | Conducted for all features of work; piling, concrete work, reinforcing, prestressing. |
| Initial Inspection | Conducted for all features of work after a representative sample is completed. |
| Follow-Up Inspection | Conducted on a daily basis as part of monitoring and surveillance. |
| Completion Inspection | Conducted for elements of work; Substructures, Roadway subbase, asphalt, drainage structures. |

## PHASE 11: ACCEPTANCE & TURNOVER

| | |
|---|---|
| Partial-Final Inspection | Completed structures and sections of roadway within a Segment. |
| Final Inspection | Completed Segments |
| Final Acceptance | Completed Project |

## 1.0 PURPOSE

1.1 To define the process by which Permanent Materials and Manufactured Products purchased by Design/Builder and its Subcontractors are inspected and released for use on Project

## 2.0 SCOPE

2.1 This procedure applies to me inspection and testing of all purchased permanent materials, equipment and services. These inspections and/or tests may be at both on site and off site and may be performed by WSDOT or D/B Q/QC

## 3.0 DEFINITIONS

3.1 WSDOT Washington State Department Of Transportation

3.2 On-site Inspection: Inspection of material performed on site.

3.3 Permanent Material: Materials and/or manufactured products incorporated into the *work.*

3.4 Receipt Inspection: Inspection of material at point of delivery.

3.5 Source Inspection: Inspection of material at the point of manufacture fabrication, and/or supply.

3.6 Laboratory Assigned laboratory responsible for work

## 4.0 RESPONSIBILITIES

4.1 The Segment Engineer shall maintain a list of all permanent material which will be purchased by Design/Builder and incorporated into the work in each Segment.

4.2 The Segment Engineer shall prepare material requisitions *for* all Permanent material purchased by Design/Builder for the Segment. The materials requisition shall include the quality and technical requirements of the contract documents as well as the requirements for submittal and approval of documentation attesting to the conformance of the procured items to the contract documents and me appropriate codes and standards contained therein. The QA/QC Segment Manager will review each requisition for completeness.

4.3 The Procurement Manager shall include in each permanent material Purchase Order (PO) the requirement that the supplier prepare a Form HC-30, Notice of Material to be Used. This form shall be forwarded to WSDOT with a copy to D/B QA/QC Department. Material Control Manager will be provided with copies of all HC-30's.

4.4 The Subcontracts Manager shall include in each subcontract the requirement that Purchase Orders for permanent material purchases by the subcontractor include the submittal of Form HC-30, Notice of Material to be Used. This form shall be forwarded to WSDOT with a copy to D/B QA/QC Department, Material Control Manager will be provided with copies of all HC-30's.

4.5 The Material Control Manager shall implement and maintain a system for monitoring and tracking all permanent materials purchased by Design/Builder for the project. The Material Control Manager shall maintain a liaison with WSDOT in order to update the status of materials.

4.6 The QA/QC Segment Manager, D/B Construction QC Representative. and the Warehouse Manager shall be responsible for conducting receipt inspections of permanent material delivered to the project.

4.7 Subcontractors shall be responsible for implementing and maintaining a procurement system which will provide control of all permanent materials purchased by them for the project. The Subcontractor QC Representative shall perform receipt inspections of all material purchased by the subcontractor and delivered to the job site as necessary and coordinate all permanent material documentation with the Segment Manager.

4.8 The QA/QC Manager shall monitor and perform audits of the material control process for compliance with this procedure.

**5.0 PROCEDURE**

5.1 Inspection and testing of purchased materials, equipment and services at off-site sources may be conducted by Design/Builder and/or WSDOT Additionally, depending on the circumstances, inspection and testing may be performed on-site.

5.2 Each Segment Engineer shall prepare a list of all permanent material to be purchased by Design/Builder and incorporated into the work. Similarly, Subcontractors shall also prepare a list of all permanent material to be incorporated into their element of work on the project. The list shall be submitted to Design/Builder Document control for subsequent transmittal to WSDOT with a copy to QA/QC with advance notice of what source inspections may be required. This material list provides the WSDOT, and QA/QC with advance notice of what source inspections may be required.

5.3 A source inspection by the WSDOT or QA/QC may be initiated when the Notice of Material to be Used. Form HC-30. is received.

5.4 The HC-30 provides the WSDOT and D/B QA/QC with information regarding quantity, type of material and location, contact and phone number of the manufacturer or supplier that requires the source inspection. Should additional materials not listed on the original HC-30 be required, an additional HC-30 needs to be completed by the supplier and transmitted WSDOT with a copy to Design/Builder.

5.5 After receiving the HC-30, WSDOT and QA/QC will determine whether or not the material requires inspection. WSDOT will determine which local Lab or agency testing lab will be responsible for the inspection.

5.6 If WSDOT elects to perform the inspection. a Notice of Materials to be Furnished. TL-608, is sent by WSDOT to the manufacturer or supplier with instructions for them to contact WSDOT and arrange to have the materials inspected prior to manufacturing or shipping the material. Currently, this notification to WSDOT must be a minimum of five days in advance of manufacture and/or shipping depending on specific inspection and testing requirements.

5.7 This procedure is applicable to all permanent materials being incorporated into the project, regardless of the origin. In some cases, the material will be inspected at the job site instead of at the source. In these instances when WSDOT requests to do the inspection or test, a Form R-28 will be initiated by WSDOT and sent to the Material Control Manager who will make arrangements with the supplier for delivery. When the material arrives on site. the Material Control Manager shall coordinate the on-site inspection with WSDOT.

5.8 Upon completion of source or on-site inspections of material by WSDOT, WSDOT will initiate an Inspection Release Tag, which is attached to the acceptable materials. In certain instances where tagging is not practical, WSDOT control lot numbers are stenciled or marked on the acceptable material. WSDOT will also complete a Report of Inspection of Material, TL-29, certifying that a material has been inspected and is acceptable for use on the project. WSDOT tags (TL-624) do not specify quantity of material inspected. As a result, a correlation between material received and incorporated into the work and material inspected and released by WSDOT can only be accomplished after the Report of Inspection of Material (TL-29) is received and compared to the material tags. This quantity correlation will be a function of the Material Control Manager in close coordination with the Segment Engineers.

5.9 When Design/Builder permanent materials arrive on the jobsite, the D/B QC Representative shall verify delivery by performing a receipt inspection and completing form, Material Inspected and Release on Job. The form shall indicate the basis for acceptance as well as document whether the material was source inspected and tagged by either WSDOT or QA/QC All documentation (Certificates of Compliance. Test Results from manufacturer and WSDOT TL-624 Inspection Release Tags) shall be submitted with the form. The QA/QC Segment Manager or his staff shall assist in the performance of Receipt Inspections when requested by the QC Representative or construction personnel.

5.10 Subcontractor permanent material delivered to the job site shall be verified and similarly inspected as indicated in subsection 5.9 of this Procedure. The subcontractor QC Representative shall perform receipt inspections utilizing form as the basis for the inspection. All documents, including WSDOT Inspection Release Tags shall be submitted to the QA/QC Segment Office with the QC Representatives Daily Report. Material which is found to be unacceptable or non-conforming shall be appropriately marked and segregated from the work area and the QA/QC Manager notified.

5.11 Material delivered directly to the warehouse shall be verified and inspected by the Warehouse Manager. The Material Control Manager shall retrieve all documents and WSDOT inspection tags at the time of inspection. All permanent material which had been received and inspected and is scheduled for subsequent release to the job site shall be appropriately tagged by the Warehouse Manager to indicate acceptable materials, or if unacceptable, identified and segregated from acceptable materials of practical to prevent inadvertent use and/or removed from the warehouse. The Warehouse Manager may request the assistance of QA/QC to assist on providing technical inspection support for materials which are found to be questionable.

## 6.0 REFERENCES

6.1 Design/Builder Quality Assurance/Quality Control Program Manual.

6.2 WSDOT Construction Manual -, Sampling and Testing

## 7.0 ATTACHMENTS

7.1 Notice of Materials to Be Used. HC-30.

7.2 Inspection Release Tag, TL-624

7.3 Report of Inspection of Material, TL-29

7.4 Inspection Request

7.5 Material Inspection and Released on Job,

7.6 Flow Chart

To:
Date:

You are hereby notified that materials required *for* use under Contract No, _____ *for* construction of Eastern Transportation Corridor in District 12, Orange County, will be obtained *from* sources herein designated, The Caltrans Liaison *for* the ETC Corridor Project is Mr. Ben Quintana.

.--

| P.O. NO. Contract NO. | QUANTITY AND MATERIAL DESCRIPTION | NAME AND ADDRESS WHERE MATERIAL CAN BE INSPECTED |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| INTENDED LOCATION OF USE: | | |
| MATERIAL ORDERED By: | | |
| ESTIMATED DELIVERY DATE: | | |

It is requested that you arrange for sampling, testing *and inspection* of materials prior to delivery *in accordance with Section* 6 *of the Standard Specifications* where the same is practicable and in accord with your policy, It *is understood that source inspection may* be *performed* by *Silverado* QA/QG, *the GEM or caltrans and does not relieve* me *of the full responsibility for incorporating in the* work *materials that comply in all respects with the contract plans and specifications, nor* does *it preclude the subsequent rejection of materials found to be unsuitable.*

Distribution:

- Transportation Laboratory 5900 Folsom Blvd.
P.O. Box 19128
Sacramento, CA 95819-0128 Fax: (916) 227-7117

Yours truly,

Subcontractor I Supplier

DESIGN
BUILD



| **MATERIAL INSPECTED AND RELEASED ON JOB** | Report No.: | Date: |
|---|---|---|
| □ Contractor<br>□ Subcontractor/Vendor | Contract No.: | Section: |
| | | Station: |
| Material: | Item No.: | |
| Supplier: | | |

| DATE OF INSPECTION | QUANTITY INSPECTED (#/Unit) | BASIS FOR I ACCEPTANCE (circle & initial) | REMARKS (Where inspected/stored description of material,. Location of use etc.) |
|---|---|---|---|
| | | | |
| | | | |
| | | | |

1. Certified of Compliance (attached)*
2. Test results from manufacturer (attached)
3. Visual inspection for overall quality, workmanship, verification of markings *
4. Approval Submittal
5. Other: _____

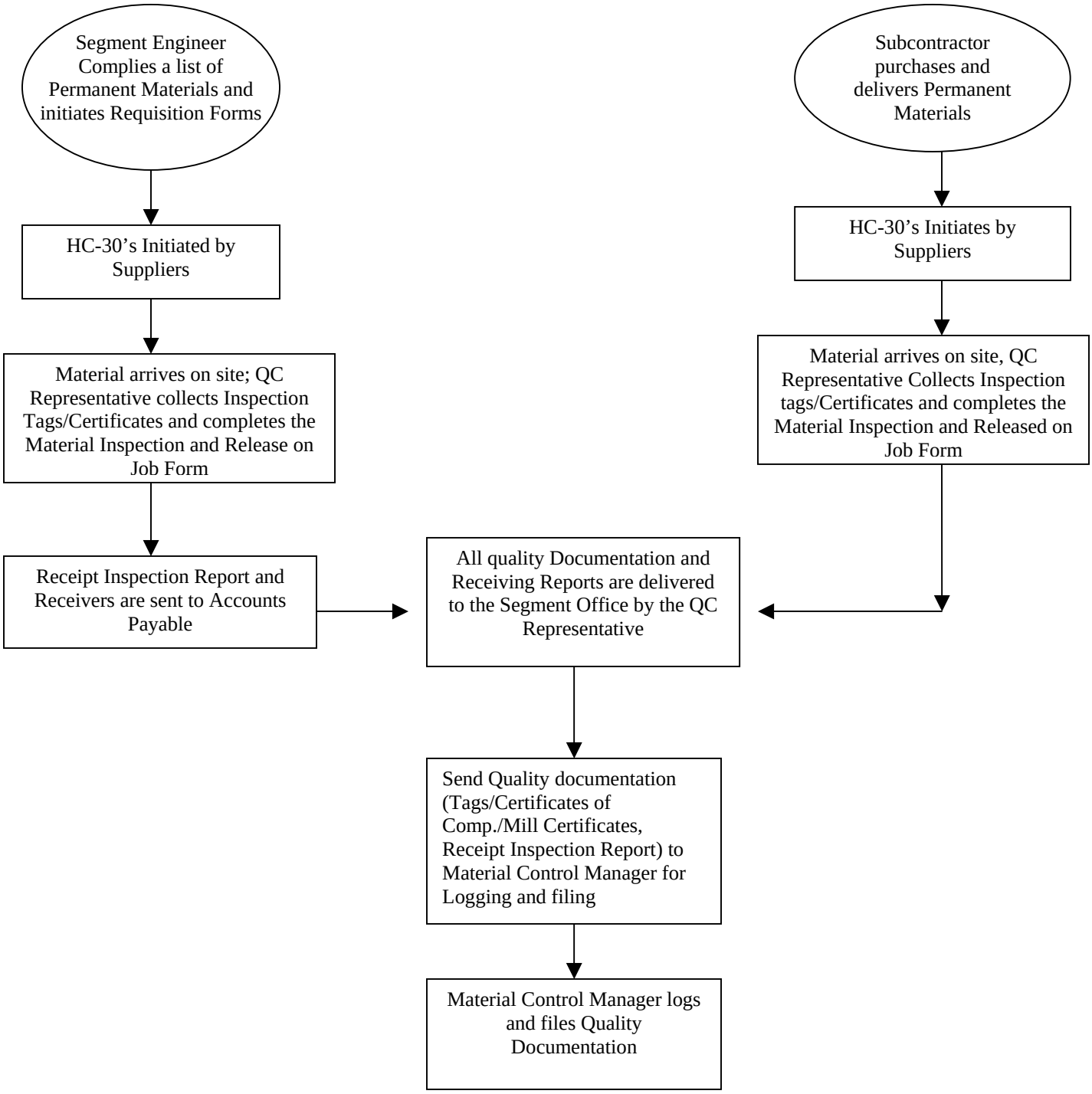
Required for ALL Materials

Inspected By: _____
Title _____

# QUALITY MANAGEMENT PROCEDURES

**Design Builder**

## RECEIPT AND INSPECTION OF PERMANENT MATERIALS



## 1.0 PURPOSE

1.1 To define the responsibilities and describe the methods and documents to be used by Design/Builder and Subcontractors for requesting clarification of field conflicts, for obtaining specification interpretations, and where necessary, obtaining the proper approvals for design changes during construction.

## 2.0 SCOPE

2.1 This procedure is intended to expedite the flow of technical information concerning the contract plans and specifications where additional information. clarification or changes are required.

## 3.0 DEFINITIONS

3.1 Major: A problem or conflict which requires a change to the design.

3.2 Minor: A clarification or revision which does not affect the design.

## 4.0 RESPONSIBILITIES

4.1 The Initiator of the RFI shall insure the RFI adequately describes the problem or conflict and where possible, provides a suggested resolution.

4.2 The Supervisor of the Initiator of the RFI shall review and verify all RFI's initiated by his organization are reasonable, valid and complete.

4.3 The Construction Segment Manager shall review and concur that the RFI is valid, the information provided is complete, and that the suggested resolution is reasonable. In addition The Segment Manager shall classify each RFI as "Major" or "Minor". The Segment Construction office shall access the RFI data base and assign each valid RFI a number.

4.4 The QA/QC Segment Manager shall review each RFI and determine if the classification of "Major" or "Minor" is valid. The QA/QC Segment Manager shall control the RFI process for his respective segment.

4.5 QA/QC Principal Engineers shall assist the QA/QC Segment Manager in the RFI review process and when possible, shall provide a response to both "Minor" and "Major" RFI's.

4.6 Section Design Managers and discipline engineers shall provide technical support for the RFI process as required. Section Design Managers shall review all "Major" RFI's and where necessary, initiate design changes.

4.7 The Document Control Manager shall make formal distribution of all RFI's as required.

4.8 The QA/QC Manager shall be responsible for ensuring the RFI process is being adequately implemented and adequately controlled through audits of the process.

## 5.0 PROCEDURE

5.1 All Design/Builder or Subcontractor personnel may originate an RFI. RFI's should clearly state specific problems or conflicts and where possible, a suggested resolution should be provided.

5.2 All RFI's submitted by D/B field staff or subcontractors shall be forwarded to the appropriate Construction Segment Manager for review. The Segment Manager will ensure the RFI is valid and any suggested resolution is acceptable. Where a given resolution is not agreeable and may adversely affect construction activities, the Segment Manager shall meet with the RFI originator to discuss other possible alternatives to the problem. The Construction Segment Manager shall make the initial determination whether the RFI should be classified as "Major" or "Minor". After assigning a data base number to the RFI, the original is forwarded to the QA/QC Segment Manager.

5.3 The QA/QC Segment Manager will review RFI's and concur with the classification of "Major" or "Minor". All RFI's shall be forwarded to the respective QA/QC Principal Engineer for review and response.

5.4 QA/QC Principal Engineers may respond to both "Minor" and "Major" RFI's and may utilize the resources of the Section Design Manager where further clarification of specific issues is required. However, in all cases involving RFI's classified as "Major", review and concurrence of the Section Design Manager will be required.

5.5 Section Design Managers shall review all "Major" RFI's and coordinate resolution with the QA/QC Principal Engineers. When necessary, Section Design Managers shall initiate any required design revisions. Revisions to the original design shall be controlled through the distribution of "Released for Construction" plans and/or specifications by Document Control.

5.6 WSDOT shall review and concur with all RF!'s before the proposed resolution can be implemented. If during their review. WSDOT determine that the "Minor" classification is not valid, then the RFI will be immediately returned to the QA/QC Segment Manager for reclassification as a "Major" RFI.

5.7 Distribution of all RFI's will be made by Document Control with copies provided to Construction, QA/QC, Design Engineering, and WSDOT.

5.8 The QA/QC Segment Manager and his staff will monitor the implementation of all changes to the work which may result from approved RFI's. Modifications to the design documents shall be tracked through As-Builts maintained by each Segment office.

**6.0 REFERENCES**

6. Design/Builder Quality Assurance/Quality Control Program Manual

6.2 Design/Builder Quality Management Procedures Manual

6.3 Design/Builder Field Procedures Manual

**7.0 ATTACHMENTS**

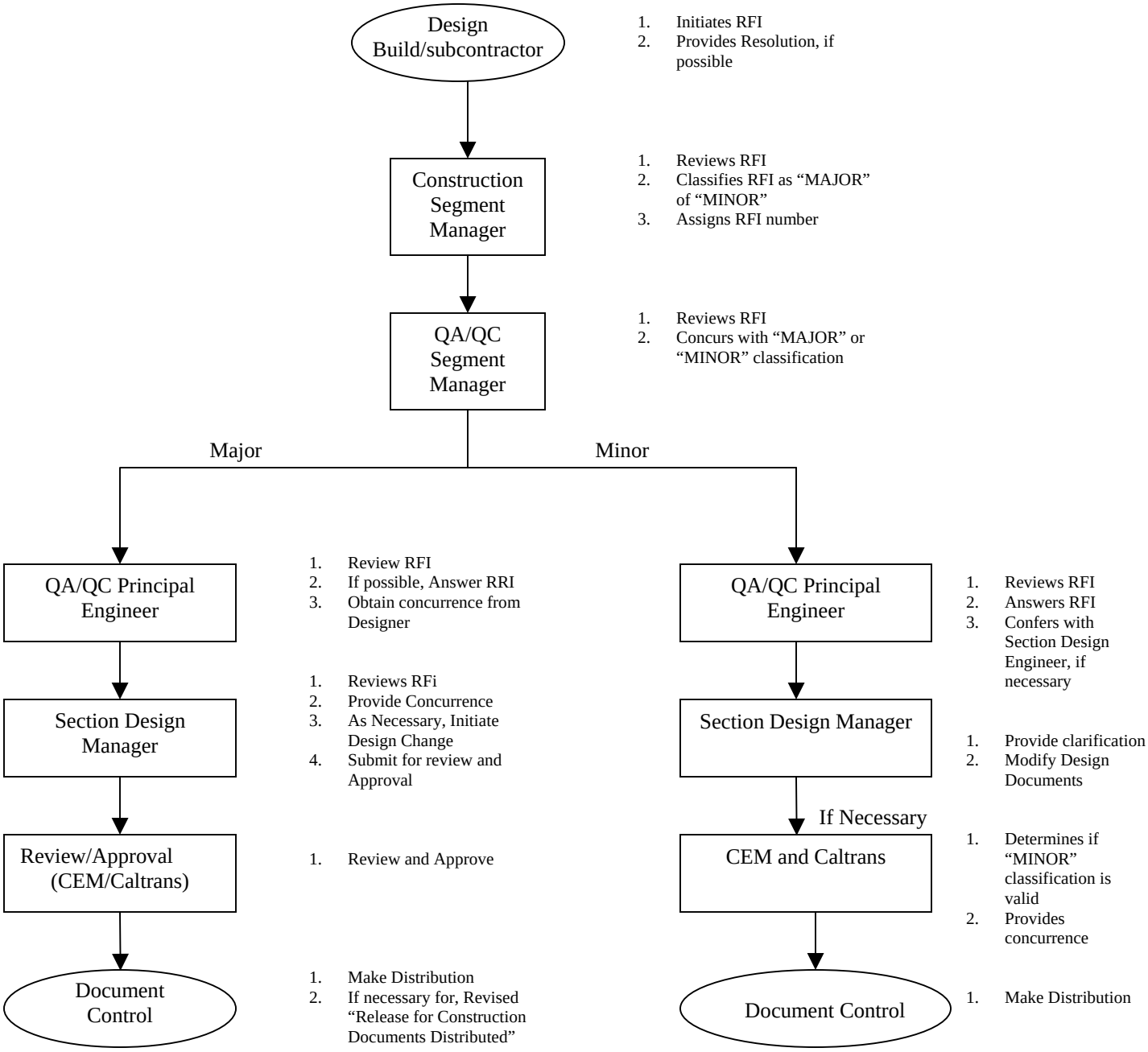
7.1 Request For Information (RFI) Form

7.2 Flow Diagram

# QUALITY MANAGEMENT PROCEDURES

**Design Builder**

## REQUEST FOR INFORMATION (RFI)



## 1.0 PURPOSE

1.1 To define the responsibilities and describe the methods and documents to be used for accepting and rejecting structural concrete.

## 2.0 SCOPE

2.1 This procedure applies to the inspection. testing and placement of structural concrete.

## 3.0 DEFINITIONS

3.1 QA/QC Technician: An individual from the QA/QC Department who is qualified and certified to perform concrete testing and sampling and who has the authority for accepting or rejecting concrete.

3.2 QA/QC Structure Representative: In addition to the responsibility of performing pre-placement approval for a structure. This individual from the QA/QC Department shall be qualified and certified to perform concrete testing and sampling and has the authority for accepting or rejecting concrete.

3.3 Construction QC Representative Structure Engineer: Construction engineer assigned to a Segment who is qualified and certified to perform concrete testing and sampling and who has the authority for accepting or rejecting concrete.

## 4.0 RESPONSIBILITIES

4.1 QA/QC Technicians. QA/QC Structure Representatives and/or Construction QC Representative Structure Engineers shall perform full-time concrete placement inspection for all structural concrete.

4.2 The QA/QC Structure Representative shall perform pre-placement inspections and coordinate all structural concrete testing requirements with the QA/QC Testing Laboratory .

4.3 The QA/QC Laboratory Manager shall schedule QA/QC Technicians to cover structural concrete placement operations.

## 5.0 PROCEDURE

5.1 All concrete placement for structural concrete shall have full-time inspection by either a QA/QC Technician, QA/QC Structure Representative and/or Construction QC Representative Structure Engineer. These personnel shall have full authority for acceptance or rejection of the concrete.

5.2 All QA/QC Technicians, QA/QC Structure Representatives and/or Construction QC Representative Structure Engineers required to perform concrete testing, shall receive specialized training on acceptability of structural concrete and their responsibilities thereto.

5.3 All QA/QC Technicians, QA/QC Structure Representatives and/or Construction QC Representative Structure Engineers required to perform concrete testing, shall possess the proper certification for all testing procedures they are required to perform.

5.4 During the placement of structural concrete, the responsible QA/QC Technician, QA/QC Structure Representative and/or Construction QC Representative Structure Engineer shall verify that each load of concrete delivered to site is the correct mix and has not exceeded the allowable time limit for placement. Additionally, each load will be visually inspected and if the appearance of the concrete is suspect, tested for penetration and temperature.

5.5 Structural concrete shall be tested and sampled in accordance with the requirements of the WSDOT Standard Specifications and Special Provisions. A record of all field test. copies of all batch tickets and certificates of compliance shall be maintained by the responsible QA/QC Technician, QA/QC Structure Representative and/or Construction QC Representative Structure Engineer.

5.6 All concrete placement records shall be transmitted to the QA/QC Segment Manager for review and subsequent filing by the QA/QC Document Control Manager.

## 6.0. REFERENCES

6.1 Quality Assurance/Quality Control Program Manual.

6.2 Quality Assurance/Quality Control Management Procedure Manual

## 7.0 ATTACHMENTS

7.1 Daily Field Inspection of Concrete

7.2 Flow Chart

DESIGN
BUILD

# DAILY FIELD INSPECTION OF CONCRETE

KIRKLAND STAGE 1



Project: _____ Structure: _____ Supplier: _____ Date: _____

Section: _____ Element: _____ Technician: _____

| MIX No. | TICKET NO. | TRUCK No. | BATCH TIME | LOAD SIZE | UNLOADING TIME | | TIME OF TEST | TOTAL MIXER REVS | WATER ADDED AT PLANT (gal.) | TEMPERATURE: F | | AVG. PEN. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | START | FINISH | | | | AMB. | CONC. | | |
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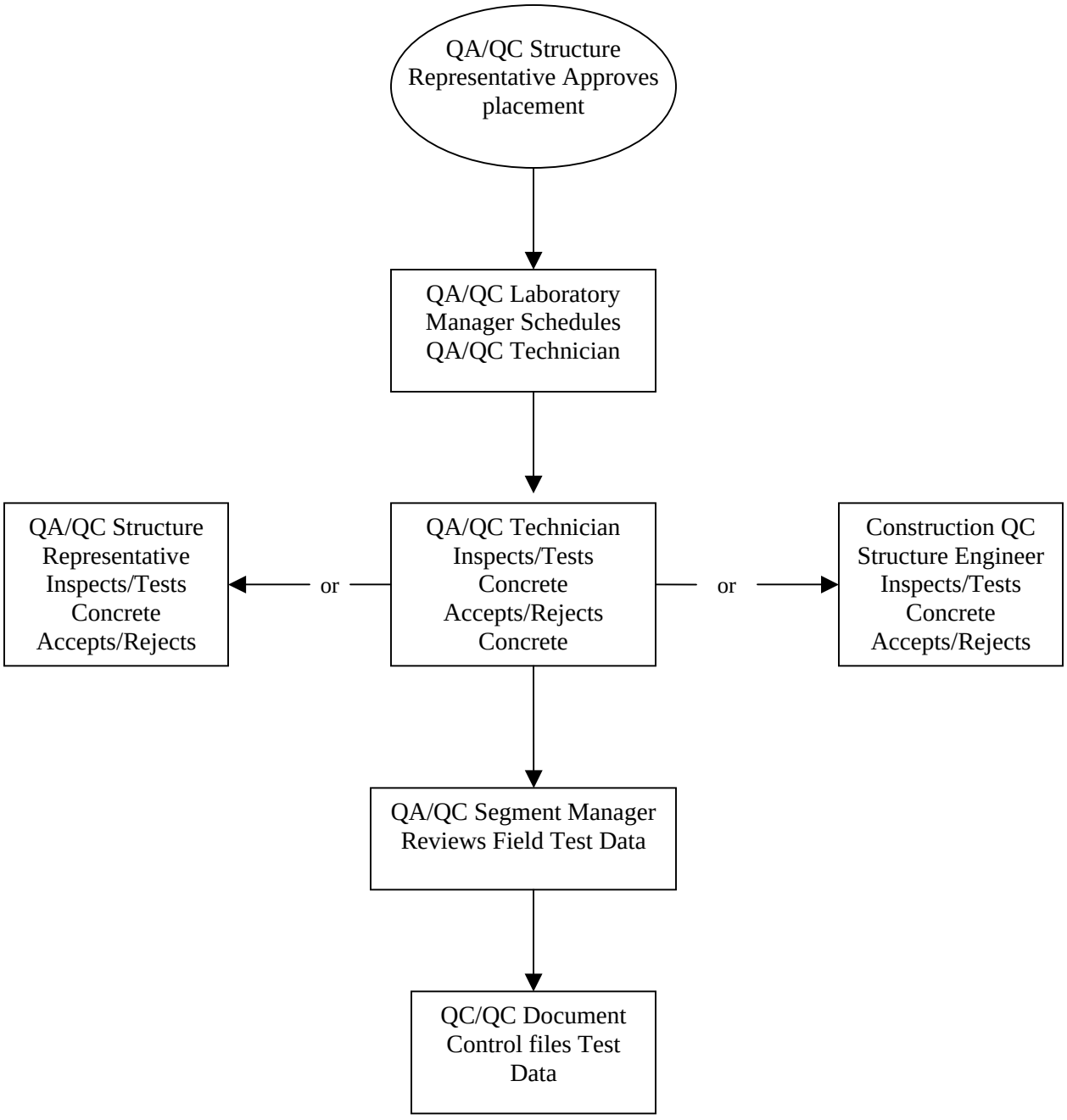
Remarks:

Technician: _____ Date: _____ Reviewed By: _____ Date: _____

**Design Builder**

# QUALITY MANAGEMENT PROCEDURES
# STRUCTUAL CONCRETE INSPECTION PROCEDURE



## 1.0 PURPOSE

1.1 To define the responsibilities and describe the methods and documents to be used by Design/Builder for reporting, handling, transporting and disposal of non-friable asbestos-cement coated irrigation pipe.

## 2.0 SCOPE

2.1 This procedure applies to all asbestos-cement coated irrigation pipe encountered and/or located on the project.

2.2 This procedure shall be used for dealing with asbestos which, as defined by the Washington State Department of Health Services, Toxic Substances Control Program, is non-friable and "non-RCRA" waste.

## 3.0 DEFINITIONS

3.1 DHS: Department of Health Services

3.2 RCRA: Resource Conservation and Recovery Act

3.3 "friable": A "friable" waste is one which can be reduced to a powder or dust under hand pressure when dry.

3.4 WSDOT Washington State Department of Transportation

## 4.0 RESPONSIBILITIES

4.1 Design/Builder and subcontractor equipment operators, construction foreman and/or superintendents shall contact the Segment Safety Supervisor when asbestos-cement coated pipe is encountered.

4.2 The Safety Supervisor shall inspect the affected site in accordance with DHS and RCRA guidelines and inform the Construction Segment Manager and QA/QC Segment Manager of his findings.

4.3 The Construction Segment Manager shall inform WSDOT of the findings and, depending on the condition of the pipe, planned measures for handling the material. Appropriate training should be completed to insure that those workers and their supervisors who may come into contact with asbestos-cement irrigation pipe follow this procedure for removal, handling and disposal.

4.4 The QA/QC Segment Manager shall monitor and document the removal, handling and transporting of asbestos-cement pipe, ensuring the requirements of this procedure are properly implemented.

## 5.0 PROCEDURE

5.1 All known underground utilities shall be located and established on utility plans prior to the start of excavation operations. Whenever excavation for asbestos-cement irrigation pipe is planned, special precautions must be taken not to damage the asbestos-cement coating around the pipe.

5.2 For operations where asbestos-cement irrigation pipe is accidentally uncovered, care must be taken to prevent damage to the asbestos-cement coating and the area identified. The foreman in charge of the work would immediately notify the appropriate supervisor who would in turn contact the D/B Safety Department.

5.3 The Safety Supervisor will inspect the condition of the pipe and inform the Construction Segment Manager of his findings. Provided the asbestos-cement coating around the pipe is not "friable", preparations for removal, handling and disposal shall be initiated. Should the Safety Supervisor's findings determine that the pipe has been damaged to the point where the asbestos-cement coating can be considered "friable" then the area shall be sealed off until appropriate removal of the material can be coordinated in accordance with applicable regulations.

5.4 Arrangements shall be made to remove the pipe without damage. The exposed surfaces shall be wet down and wrapped as necessary with 6(six) mil visqueen and securely taped. Appropriate care shall be exercised to prevent the material from becoming airborne and/or friable.

5.5 Caution labels shall be affixed to each item. Labels must be in legible lettering in the form of the following warning: "CAUTION, Contains Asbestos Fibers. Avoid Creating Dust. Breathing Asbestos Dust May Cause Serious Bodily Harm."

5.6 The pipe will then be relocated or otherwise stockpiled in a suitable area (warehouse, storage bin, etc.) for storage until arrangements can be made for transportation to an approved off project site.

## 6.0 REFERENCES

6.1 Washington Department of Health Services Toxic Substances Control Program

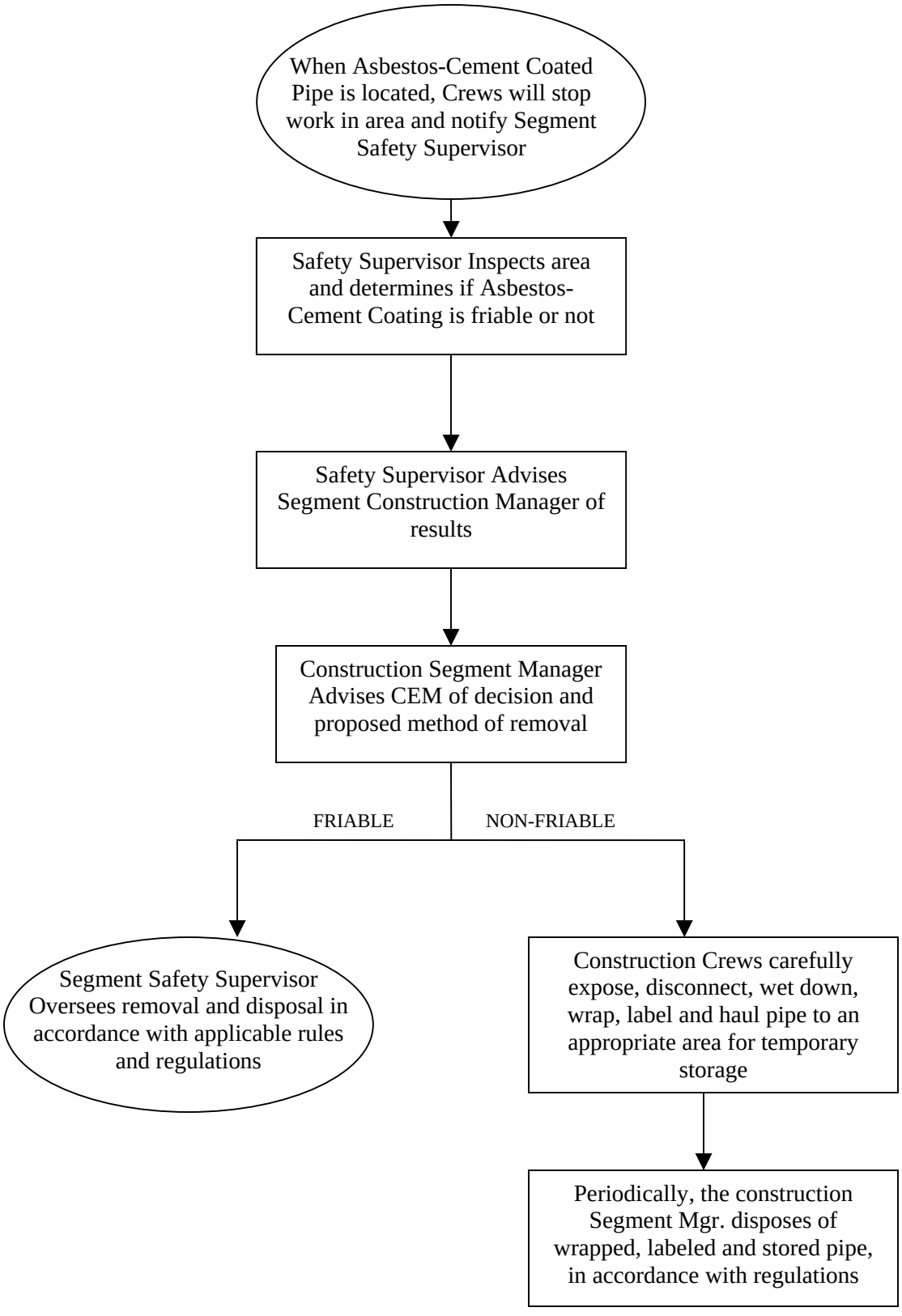
6.2 Resource Conservation and Recovery Act

**7.0 ATTACHMENTS**

7.1 Flow Chart

7.2 Sample Label

| Design Builder | QUALITY MANAGEMENT PROCEDURES<br>STRUCTUAL CONCRETE INSPECTION PROCEDURE |
| --- | --- |


When Asbestos-Cement Coated Pipe is located, Crews will stop work in area and notify Segment Safety Supervisor
Safety Supervisor Inspects area and determines if Asbestos-Cement Coating is friable or not
Safety Supervisor Advises Segment Construction Manager of results
Construction Segment Manager Advises CEM of decision and proposed method of removal
FRIABLE
NON-FRIABLE
Segment Safety Supervisor Oversees removal and disposal in accordance with applicable rules and regulations
Construction Crews carefully expose, disconnect, wet down, wrap, label and haul pipe to an appropriate area for temporary storage
Periodically, the construction Segment Mgr. disposes of wrapped, labeled and stored pipe, in accordance with regulations

## 1.0 PURPOSE

1.1 To define the responsibilities and describe the methods and documents to be used to carry out **Follow-up** or **Weekly Inspections** of environmental related work activities.

## 2.0 SCOPE

2.1 This procedure applies to the **Follow-up Inspections** performed weekly by the QA Segment Manager and his QA Representatives together with Construction QC Representatives of the work activities.

## 3.0 DEFINITIONS

3.1 Work Activities: Work to be performed as required by the Contract Specifications.

## 4.0 RESPONSIBILITIES

4.1 Each QA Segment Manager and/or his QA Representative shall perform Weekly Follow-up Inspections and document the results.

4.2 Each Design/Builder Construction Segment Manager and/or his QC Representative shall perform Weekly Follow-up Inspections and document the results.

## 5.0 PROCEDURE

5.1 Following the preparatory inspection and the start of work, **Follow-up Inspections** shall be performed weekly by the Segment Quality Assurance Representative, and the Construction QC Representatives.

5.2 The object is to assure the continuing conformance of the work to the contract requirements and the workmanship standards established during the preparatory and initial inspections.

5.3 **Follow-up Inspections** shall be performed weekly and documented in the **Design Build Weekly Quality Assurance Report, Environmental Checklist** or **the Contractor's Weekly Quality Control Report, Environmental Checklist.**

5.4 The **Follow-up Inspection** information shall be entered on the appropriate forms by the Quality Assurance Representatives and the Construction QC Representatives

5.5 At the completion of the **Follow-up Inspection**, the report shall be signed by the appropriate QA/QC Representatives.

5.6 During the **Follow-up Inspection**, any deficient or non-conforming item shall be referenced and noted on the report.

5.7 During the **Follow-up Inspection**, deficient items which are not immediately corrected, shall also be noted on a Construction Deficiency Report Sheet (punch lists). These reports shall be signed by the QA Representative and included with the specific inspection report or the QA Daily Report. Copies will be given to Construction Representatives for corrective action.

5.8 The **Weekly Quality Assurance and Quality Control Reports** shall be completed weekly and returned to the QA/QC Manager by **9:00 am** of the following Monday.

## 6.0 REFERENCES

6.1 Design/Builder Quality Assurance/Quality Control Program

## 7.0 ATTACHMENTS

7.1 Design/Builder Weekly Quality Assurance Report, Environmental Checklist

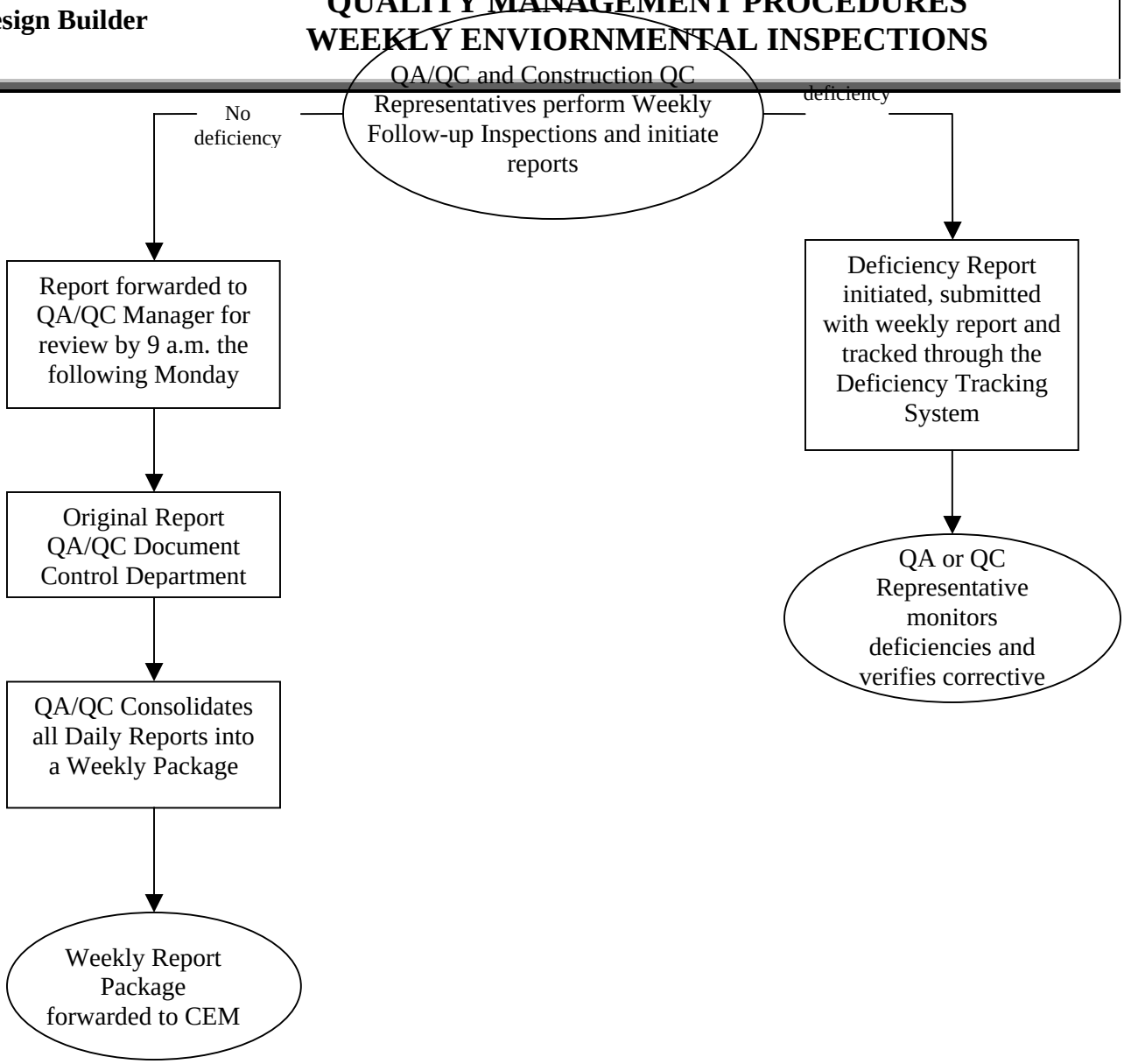
7.2 Contractor Weekly Quality Control Report, Environmental Checklist

7.3 Construction Deficiency Report Sheets

7.4 Flow Chart

**Design Builder**

# QUALITY MANAGEMENT PROCEDURES
# WEEKLY ENVIORNMENTAL INSPECTIONS



| DESING BUILD WEEKLY QUALITY ASSURANCE REPORT<br>ENVIRONMENTAL CHECKLIST | Report No.: | Week Ending: |
|---|---|---|
| □ Contractor<br>□ Subcontractor/Vendor | Contract No.: | Section: |

| QC INSPECTIONS | ACCEPTABLE | | | REMARKS/NOTIFICATION |
|---|---|---|---|---|
| | YES | No | NA | |
| **APPROVED LIMITS OF WORK:** | | | | |
| a) Grading limits marked (Plan date: _____) _____ | □ | | | |
| b) ESA fencing installed/maintained. | □ | | | |
| c) Signed clearance for work outside ESA limit | | | | |
| **ENVIRONMENTALLY SENSITIVE AREAS:** | | | | |
| a) Active nesting sites protected | | | | |
| b) Sensitive vegetation areas marked | | | | |
| c) Trees protected with fencing | 0 | 0 | 0 | |
| d) Archeological areas marked | 0 | 0 | 0 | |
| e) Archeo. site monitored (CEM) during grading | 0 | 0 | 0 | |
| **EROSION CONTROL, SWPPP** (OCT. 1 TILL APRIL 30): | | | | |
| a) Erosion control devices in place | 0 | 0 | 0 | |
| b) Slope protection (device: _____) | 0 | 0 | 0 | |
| c) Storm drain inlet protection | 0 | 0 | 0 | |
| d) Stream protection (device: _____) | 0 | 0 | 0 | |
| e) Sediment basin maintenance | 0 | 0 | 0 | |
| f) _ Sandbags __Silt Fences __Straw Wattles __ Hay Bales __Berms | 0 | 0 | 0 | |
| g) Check dam maintenance | 0 | 0 | 0 | |
| h) Temporary diversion ditches | 0 | 0 | 0 | |
| I) Stabilized construction entrance/exit | 0 | 0 | 0 | |
| j) SWPPP checklist completed (wkly and pre/post storm event, 40% chance or more) | 0 | 0 | 0 | |
| **HAZARDOUS MATERIAL MANAGEMENT:** | | | | |
| a) Fuel storage areas: | 0 | 0 | 0 | |
| b) Vehicle maintenance & fueling areas: | 0 | 0 | 0 | |
| c) Waste storage areas: | 0 | 0 | 0 | |
| d) _Asbestos Pipe __Contaminated Soil __Other | 0 | 0 | 0 | |
| e) No fueling/maintenance/storage within 500 ft. of blueline drainage | 0 | 0 | 0 | |
| **DUST CONTROL: AQMD** | | | | |
| a) On site dust control | 0 | 0 | 0 | |
| b) Dust control on off site haul roads/yards | 0 | 0 | 0 | |
| c) No dust accumulation on vegetation (weekly spraying or as needed) | 0 | 0 | 0 | |
| **OTHER MITIGATION MEASURES:** | | | | |
| a) Dewatering Operations: Permit _Monitoring - Testing - No sediment into drainage | 0 | 0 | 0 | |
| b) Concrete cleanout locations | 0 | 0 | 0 | |
| c) Litter control | 0 | 0 | 0 | |
| d) Monitor activities: _Archeo. - Paleo. - Biological | 0 | 0 | 0 | |
| e) Fire control | 0 | 0 | 0 | |
| f) Noise restrictions | 0 | 0 | 0 | |

Contractor's QC Representative:

NOTE: This form should be completed weekly and returned to the Quality Assurance Office by 9:00 a.m. the following day.

**Design/Builder**

# CONSTRUCTION DEFICIENCY REPORT - DATA INPUT SHEET

(To Be Turned in Daily)

☐ Subcontractor/Vendor

**Kirkland Stage1 D/B Project**
**600 108th Ave. Suite 405**
**Office 425-456-8500**

BY: _____

| Contractor I.D. | Segment<br>Section | Station<br>Discipline | Item Description | Action By 1<br>Action By 2 | Date ID<br>Insp. Type | Schd. Cmplt. | Comments |
|---|---|---|---|---|---|---|---|
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|---|---|---|
| □ Contractor<br>□ Subcontractor/Vendor | Contract No.: | Section: |

| QC INSPECTIONS | ACCEPTABLE | | | REMARKS/NOTIFICATION |
|---|---|---|---|---|
| | YES | No | NA | |
| **APPROVED LIMITS OF WORK:** | | | | |
| a) Grading limits marked (Plan date: _____) _____ | □ | | | |
| b) ESA fencing installed/maintained. | □ | | | |
| c) Signed clearance for work outside ESA limit | | | | |
| **ENVIRONMENTALLY SENSITIVE AREAS:** | | | | |
| a) Active nesting sites protected | □ □ | □ | □ | |
| b) Sensitive vegetation areas marked | □ □ | □ | □ | |
| c) Trees protected with fencing | □ □ | □ | □ | |
| d) Archeological areas marked | □ □ | □ | □ | |
| e) Archeo. site monitored (CEM) during grading | □ □ | □ | □ | |
| **EROSION CONTROL, SWPPP** (OCT. 1 TILL APRIL 30): | □ □ | □ | □ | |
| a) Erosion control devices in place | □ □ | □ | □ | |
| b) Slope protection (device: _____) | □ □ | □ | □ | |
| c) Storm drain inlet protection | □ □ | □ | □ | |
| d) Stream protection (device: _____) | □ □ | □ | □ | |
| e) Sediment basin maintenance | □ □ | □ | □ | |
| f) __ Sandbags __Silt Fences __Straw Wattles | □ □ | □ | □ | |
| __ Hay Bales __Berms | □ □ | □ | □ | |
| g) Check dam maintenance | □ □ | □ | □ | |
| h) Temporary diversion ditches | □ □ | □ | □ | |
| I) Stabilized construction entrance/exit | □ □ | □ | □ | |
| j) SWPPP checklist completed (wkly and pre/post | □ □ | □ | □ | |
| storm event, 40% chance or more) | □ □ | □ | □ | |
| **HAZARDOUS MATERIAL MANAGEMENT:** | □ □ | □ | □ | |
| a) Fuel storage areas: | □ □ | □ | □ | |
| b) Vehicle maintenance & fueling areas: | □ □ | □ | □ | |
| c) Waste storage areas: | □ □ | □ | □ | |
| d) _Asbestos Pipe __Contaminated Soil __Other | □ □ | □ | □ | |
| e) No fueling/maintenance/storage within 500 ft. | □ □ | □ | □ | |
| of blueline drainage | □ □ | □ | □ | |
| **DUST CONTROL: AQMD** | □ □ | □ | □ | |
| a) On site dust control | □ □ | □ | □ | |
| b) Dust control on off site haul roads/yards | □ □ | □ | □ | |
| c)No dust accumulation on vegetation (weekly | □ □ | □ | □ | |
| spraying or as needed) | □ □ | □ | □ | |
| **OTHER MITIGATION MEASURES:** | □ □ | □ | □ | |
| a) Dewatering Operations: Permit __Monitoring | □ □ | □ | □ | |
| __ Testing __ No sediment into drainage | □ □ | □ | □ | |
| b) Concrete cleanout locations | □ □ | □ | □ | |
| c) Litter control | □ □ | □ | □ | |
| d) Monitor activities: __Archeo. __ Paleo. | □ □ | □ | □ | |
| __ Biological | □ □ | □ | □ | |
| e) Fire control | □ □ | □ | □ | |
| f) Noise restrictions | □ □ | □ | □ | |

Contractor's QC Representative:

NOTE: This form should be completed weekly and returned to the Quality Assurance Office by 9:00 a.m. the following day.

## 1.0 PURPOSE

1.1 To define the method for controlling and identifying drawings and documents used for construction.

## 2.0 SCOPE

2.1 This procedure applies to the stamping and logging of design documents which will be released for construction.

## 3.0 DEFINITIONS

3.1 Design/Builder

3.2 Design Documents: Drawings, Sketches Design Plans, Specifications, Special Provisions, Shop

## 4.0 RESPONSIBILITIES

4.1 The Design Manager is responsible for transmitting approved Design Documents to the Design Quality Control Coordinator for release for construction which have received WSDOTapproval.

4.2 The Design Quality Control Coordinator is responsible for stamping, and logging all design documents which are to be released for construction.

4.3 The Document Control Manager is responsible for controlling and distributing approved design documents to designated individuals and departments in accordance with the established Project Document Control Procedures.

4.4 The Construction Manager shall ensure that only the latest "Release For Construction" documents are being used in the field.

4.5 The Quality Assurance/Quality Control Manager shall perform audits/surveillance of the issue of design documents to verify that established controls are being implemented and current approved and stamped "Release For Construction" documents are used at the place *of* work.

4.6 The Construction Environmental Manager shall certify all environmental requirements have been satisfied by initialing WSDOT approved letter.

## 5.0 PROCEDURE

5.1 All design documents shall be controlled throughout the design process as outlined in the Quality Assurance/Quality Control Program Manual.

5.2 At the completion of the design approval process the Design Manager shall coordinate the release of approved design documents with the Design Quality Control Coordinator. All approved design documents and drawings shall include an Agency letter concurring with the release for construction. In addition to verifying Agency approval, and prior to releasing any documents and drawings for construction, the Design Quality Control Coordinator shall ensure that the D/B Environmental Manager has certified all environmental mitigation measures have been satisfied by initialing the Agency approved letter.

5.3 All design documents approved for release to the field shall be appropriately logged and stamped "Released for Construction". The Design Quality Control Coordinator will sign, date, and electronically log each stamped document prior to transmitting the documents to the Document Control Department for subsequent reproduction and distribution.

## 6.0 REFERENCES

6.1 Design/Builder Quality Assurance/Quality Control Program Manual

6.2 Project Document Control Procedure

## 7.0 ATTACHMENTS

**7.1** Sample "Released For Construction" Stamp

## 1.0 PURPOSE

1.1 To define the responsibilities and describe the methods and documents to be used to process the **Asphalt Paving Pre-Placement Report.**

## 2.0 SCOPE

2.1 This procedure applies to the **Asphalt Paving Pre-Placement Report,** initiated and processed to control and coordinate project Inspection activities leading up to the placement of asphalt paving materials.

## 3.0 DEFINITIONS

3.1 Design/Builder

3.2 Project Team Member: Construction Foremen, Assistant Superintendents.

3.3 Item of Work: Work that is required to be performed by the Contract Documents, a work item, segment or structure, etc.

## 4.0 RESPONSIBILITIES

4.1 Each D/B Project Team member is responsible for bringing construction work item features up to the point of an asphalt paving placement and initiates the asphalt paving pre-placement report

4.2 Design/Builder Subcontractor's applicable QC Representatives inspect and accept all facets of work leading up to a placement of asphalt pavement. The checklist on Form is initialed by the appropriate QC Representative inspecting each feature of the work.

4.3 The Subcontractor QC Representative performing the asphalt paving shall sign-off **the Subsequent Subcontractor Preplacement Inspection** on Form verifying the subgrade preparation by Design/Builder prior to paving.

4.4 The Design/Builder QC Representative faxes the Asphalt Paving Request Form to the QA Segment Manager a minimum of 24 hours prior to the placement of paving materials to facilitate scheduling of D/B QA Lab resources.

4.5 The QA Segment Manager forwards the Asphalt Paving Request Form to the QA Principal Paving Engineer who coordinates with the D/B QA Lab for the required plant and field testing/inspections.

4.6 D/B's Quality Assurance Representative does overall QA inspection prior to the placement and signs the Asphalt Paving Pre-placement Report Form approving the release for ordering ATPB and/or asphalt concrete materials.

4.7 QA Field Technician performs field density tests and reports the field test data to the Construction QC Representative and the QA Representative. The AC Pavement Relative Compaction Test Form is used to record/report the results.

**5.0 PROCEDURE**

5.1 An **Asphalt Paving Pre-Placement Report** shall be initiated by the Design/Builder Project Team member on the work item feature prior to placement of asphalt paving.

5.2 The **Asphalt Paving Pre-Placement Report** form requires information from the Construction QC Representatives and Subcontractor QC Representative who will initial or sign their response on Form

5.3 The details for the completion of the form are described on the back of Form

5.4 The QA Representative shall verify that all subsurface facilities and subgrade materials have been installed and inspected prior to the placement of ATPB and/or AC paving materials, initial the form, and sign-off the authorization to order paving materials.

5.5 Only approval of the QA Representative shall release the ordering of asphalt paving materials.

5.6 The QA Field Technician shall take various aggregate, bitumen and completed mix samples as required by the Specifications during the manufacture and placement of the paving materials and record/report all of the field/lab test results.

5.7 The Subcontractor QC Representative from the asphalt plant shall take various aggregate, bitumen and completed mix samples and perform tests as required by the Specifications and/or outlined in the Quality Assurance/Quality Control Program Manual included with the appropriate subcontract.

5.8 The Asphalt Paving Pre-Placement form shall be signed by the appropriate QA Representative and forwarded to QA Records with the weigh master certificates for filing.

## 6.0 REFERENCES

6.1 Design/Builder Quality Assurance/Quality Control Program.

## 7.0 ATTACHMENTS

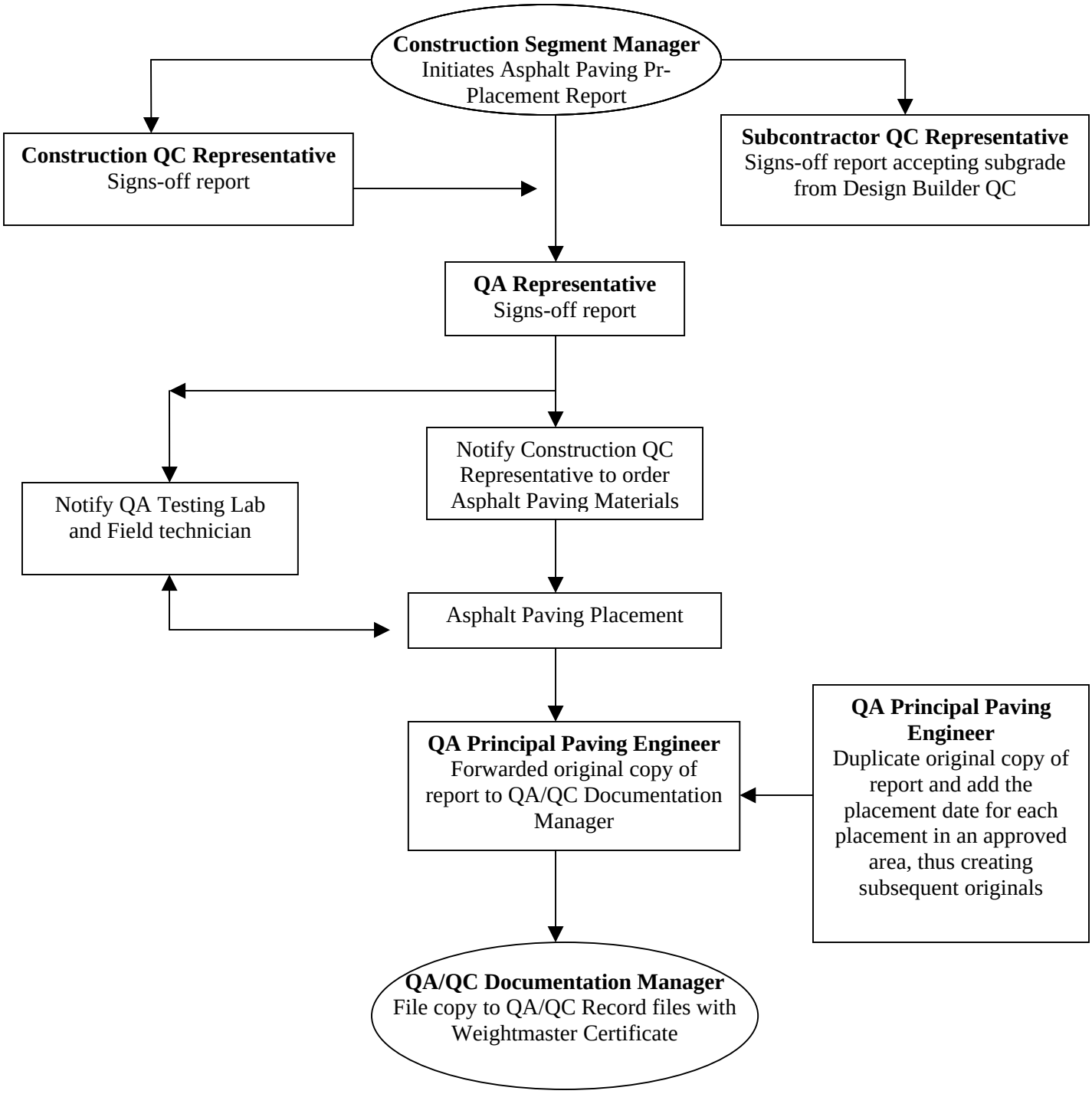
7.1 **Asphalt Paving Request Form**

7.2 **Asphalt Paving Pre-Placement Form**(Front Page):

7.3 **Asphalt Paving Pre-Placement Form** Completion Instruction (Rear Page):

7.4 **AC Pavement Relative Compaction Test Form**

7.5 **Asphalt Paving Pre-Placement Flow Chart**


**Construction Segment Manager**
Initiates Asphalt Paving Pr-Placement Report
**Construction QC Representative**
Signs-off report
**Subcontractor QC Representative**
Signs-off report accepting subgrade from Design Builder QC
**QA Representative**
Signs-off report
Notify Construction QC Representative to order Asphalt Paving Materials
Notify QA Testing Lab and Field technician
Asphalt Paving Placement
**QA Principal Paving Engineer**
Forwarded original copy of report to QA/QC Documentation Manager
**QA Principal Paving Engineer**
Duplicate original copy of report and add the placement date for each placement in an approved area, thus creating subsequent originals
**QA/QC Documentation Manager**
File copy to QA/QC Record files with Weightmaster Certificate

# Design Build

## ASPHALT PAVING REQUEST

### ATPB/AC PAVING & AC DIKE

Today's Date: _____

Design Build Cost Code: _____

Date of Work: _____

Purchase Order No.: _____

Supplier: _____

Phone: _____

Fax: _____

Plant: _____

Mix Design No.: _____

| | | |
|---|---|---|
| ☐ *3/4"* Type B Max. Med. | ☐ OCEMA *3/4"* (111-8-2) Base Course | ☐ OCEMA *3/4"* (111-8-3) Base Course |
| ☐ *1/2"* Type B Max. Med. | ☐ OCEMA *1/2"* (lII-c-3) Base & Surface Course | ☐ OCEMA *3/8"* (III-D) Surface Course |
| ☐ AC Dike *3/8"* Max. | ☐ ATPB | |

Confirmation Call: _____

Name of person at Asphalt Plant

Start Date/Time: _____

End Date/Time: _____

**AC Requested Tonnage:** _____ Tons

**A TPB Requested Tonnage:** _____ Tons

Location of use: Segment: _____

Section:

Paving Location: _____

Directions to paving site: _____

**Requester:**

This form is to be filled out prior to a placement of asphalt paving. Contractor initiates the form. The inspector coordinator checks the area and calls Quality Assurance to check through the area and witness the paving.

This form serves as an audit to ensure that all subsurface facilities have been installed and inspected prior to the placement of A TPB or AC paving.

The QA Segment Manager or designee initials the form at the completion of the aggregate base subgrade prior to paving. The QA Segment Manager and/or QA Principal Paving Engineer or their designee initials the form prior to placing the surface course of asphalt to ensure that electrical systems components for signals, lighting and COS are installed.

A. **SUBCONTRACTOR/VENDOR -** Check box, then write name of the subcontractor/vendor performing the work.

B. **REPORT** NO. - Leave Blank. The QA/QC Documentation Manager will fill in the date.

C. **DATE** - Date this report is initiated.

D. **SEGMENT/SECTION** - Check the appropriate box for the Segment and enter the appropriate Section Number where the approved paving area resides.

E. **APPROV AL TO PAVE**: Specifically define the location of the area *to* be paved. Indicate the Direction. Station Interval and applicable Reference Lines. The check box(es) for the Paving Layer are *to* be checked by the QA/QC Principal Paving Engineer.

F. **TYPE OF PLACEMENT** - Check the type of paving area approved for paving.

G. **MATERIAL TYPE -** The QA/QC Principal Paving Engineer will check the appropriate box each day pavement is placed in the area approved by this report.

H. **PAVING SECTION** - Check the appropriate R-Value of the pavement section in the area approved for paving.

I. **PLACEMENT DATE** - Leave Blank. The QA/QC Principal Paving Engineer will enter the date and attach a copy of the preplacement report with the weighmaster certificates for that date.

J. **TONNAGE** - Leave Blank. The QA/QC Principal Paving Engineer will enter the tonnage of material placed in the approved paving area on the appropriate date.

K. **TIME START/FINISH**- Leave Blank. The QA/QC Principal Paving Engineer will enter the shift hours of each paving date.

L. **DRAWING NO**. **-** Contract drawings applicable *to* the placement area. Include DCN number.

M. **TYPE** - Contract drawing or RFI number.

N. **CHECKLIST DATE** - Note the date each item on the check list is verified.

O. **CONSTRUCTION QC REPRESENTATIVE -** Contractor QC initials each item as ready prior *to* paving.

P. **QA CHECK** - SL V Quality Assurance Representative initials each item as ready prior *to* paving.

Q. **SUBSEQUENT SUBCONTRACTOR PREPLACEMENT INSPECTION**: Signature *of* Subcontractor QC Representative followed by the date *of* inspection *of* subgrade preparation.

R. **PREPLACEMENT APPROVAL -** Signature *of* SL V Quality Assurance Representative followed by the date of approval.

S. **REMARKS** - For any necessary information pertaining *to* the placement or placement conditions.